

TYPIFICATION OF EIGHT VICTORIAN SPECIES NAMES IN EUCALYPTUS

by

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The names for at least eight Victorian eucalypts have never been typified by a specimen and/or illustration. No type collection was cited with the original diagnoses (seven by F. Mueller and one by A. W. Howitt), under which were given merely the known habitats and distributional ranges of these species. It is desirable that, for each entity, a specimen as representative as possible be designated LECTOTYPE from amongst the material examined by the author, used in drawing up his original description and still housed at the National Herbarium of Victoria. A particular desideratum is typification of the name *Eucalyptus regnans* (Mountain Ash), referring to the tallest and largest flowering plant in the world. Unfortunately, many of the collections eligible and available for selection as type are in a rather fragmentary and unsatisfactory state; no juvenile foliage accompanies any of them. In some instances, two or more loose labels accompany several unmounted specimens, and it is not now possible to say which element rightly belongs to any label. The writer has made what he believes to be the best possible choice of type specimens, details of which are set out hereunder. Binomials are arranged alphabetically as to epithet, and explanatory notes are given in each instance.

1. ***Eucalyptus behriana*** F. Muell. in *Trans. Vict. Inst.* 34 (1855).

LECTOTYPE: Near Bacchus Marsh, Victoria—"In montibus petraeis sterilibus tractus Bacchus Marsh". F. Mueller, Jan. 1853 (MEL n. 10388).

Geographical data cited with original description: "In arid plains and on stony bare hills near the Avoca, Murray, Gawler River and in Bacchus Marsh"

Of existing material from these four regions, that of the last and easternmost locality is in reasonable condition, consisting of an ample spray of adult leaves with buds and flowers; a few detached fruits are in an accompanying envelope. This collection, now chosen as lectotype, most probably came from the high ridge between Djerriwarrh Creek and Anthony's Cutting (about 3 miles east of Bacchus Marsh) where the species continues to grow in fair quantity.

2. ***Eucalyptus bosistoana*** F. Muell. in *Aust. J. Pharm.* 10: 293 (Oct. 1895).

LECTOTYPE: Between the Nicholson and Tambo Rivers, Victoria. *Schlipalius* (MEL n. 10389).

Geographical data cited with original description: Following his diagnosis, Mueller lists no less than nine collections from between Port Jackson (N.S.W.) and Wilson's Promontory (Vic.), viz—Cabramatta (Rev. Dr. W. Woolls), County of Camden (Rev. Dr. W. Woolls), near Mt. Dromedary (Miss M. Bate), near Twofold Bay (L. Morton), near

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the Genoa (*Barnard*), on the summit of Tantowango Mountains [=Tantawanglo Mtn. between Bega and Bombala] (*A. W. Howitt*), near the Mitchell River (*A. W. Howitt*), between the Tambo and Nicholson Rivers (*Schlipalius*), near the Strzelecki Ranges [=Strzelecki] (*Olsen*).

Although the specimen chosen (a flowering spray collected by one *Schlipalius*, without date) is not accompanied by the name *E. bosistoana* in Mueller's hand, the folder does contain a slip of paper on which he has made pencil drawings of longitudinal flower-sections and anther details. Unfortunately no fruits are present.

3. ***Eucalyptus fasciculosa*** F. Muell. in *Trans. Vict. Inst.* 34 (1855).

LECTOTYPE: Bugle Range (between Mount Barker and Strathalbyn), South Australia—"Locis lapidosis sterilioribus montium Bugle range". *F. Mueller*, Aug. 1850 (MEL n. 10390).

Geographical data cited with original description: "On barren ridges along St. Vincent's Gulf, on the Gawler River, in the Mount Lofty Ranges and Bugle Ranges, and on Encounter Bay".

The sheet selected for type bears Mueller's early handwriting under the name *E. fasciculosa*, and contains a leafy branch with relatively large fruits (8 x 6 mm.), but neither flowers nor buds.

4. ***Eucalyptus gracilis*** F. Muell. in *Trans. Vict. Inst.* 35 (1855).

LECTOTYPE: Murray Scrub, South Australia. *F. Mueller*, Dec. 1848 (MEL n. 10391).

Geographical data cited with original description: "In the desert on the Murray River".

There is but a single collection in Melbourne Herbarium, coming from this region and labelled (as above) by its discoverer. Inevitably it must be denominated type, although it consists of only a small broken branchlet bearing leaves, buds and flowers, but no capsules. The material from which mature fruits were described seems to have disappeared. Why Dr. Behr's name should also have been written by Mueller against this specimen is rather puzzling, for Herman Behr left South Australia and returned to Germany in 1847—before Mueller's arrival in Adelaide.

5. ***Eucalyptus largiflorens*** F. Muell. in *Trans. Vict. Inst.* 34 (1855).

LECTOTYPE: Murray River above Moorundie, South Australia—"Murray Scrub supera Morunde". *F. Mueller*, 1 Feb. 1851 (MEL n. 10392).

Geographical data cited with original description: "In bushy barren localities on the Murray, Avoca, Wimmera, and on St. Vincent's Gulf".

The Murray River specimen (from near Moorundie) has leaves, buds and flowers but no fruits; it is the best of the four possible type collections examined by Mueller and has been chosen as lectotype. This name replaces *E. bicolor* A. Cunn. ex Hook. (1848) which, until recent years, was universally applied to the Black Box tree throughout eastern Australia. A. K. Cameron, in *Vict. Nat.* 63: 42 (June

1946), again drew attention to the opinion of Dr. T. A. Sprague that the original description of *E. bicolor* was too vague, brief and insufficient to legitimize the name—it was a *nomen subnudum*.

6. ***Eucalyptus leucoxylo*** F. Muell. in *Trans. Vict. Inst.* 33 (1855).

LECTOTYPE: "Towards the apex of St. Vincent's Gulf", South Australia. F. Mueller, 7 Nov. 1851 (MEL n. 10393).

Geographical data cited with original description: "In grassy plains from the Avoca to St. Vincent's and Spencer's Gulf".

There is abundant early and reasonably good material in Melbourne Herbarium from which to select a type; 12 sheets from the herbarium of O. Sonder (all labelled by Mueller) are included. The writer has fixed upon a well-preserved collection from near the head of St. Vincent's Gulf, showing glaucescent branchlets, adult foliage, mature buds and flowers, and smallish almost semi-globoid capsules.

7. ***Eucalyptus muelleriana*** A. W. Howitt in *Trans. roy. Soc. Vict.* 2: 89, tt. 12 & 13 (1891).

LECTOTYPE: "Nine Mile Creek, South Gippsland" [near Hedley], Victoria. A. W. Howitt, n. 6 (MEL n. 10394).

Geographical data cited with original description: Howitt (*l.c.*) remarks as follows concerning his newly described eucalypt—"It is a littoral species, and is principally found between the Hoddle Ranges and the sea coast. There it forms the bulk of the forest, growing upon sands and sandy clays, from Monkey Creek (20 miles from Sale) to Shady Creek (west of Alberton), in an east and west direction, and from Carrajung southwards to the coast. The area thus covered by this tree is about 300 square miles".

In Melbourne Herbarium there are five possible sheets of type, bearing Howitt's undated locality labels, but most of these are miserable fragments. Only one collection (from Nine Mile Creek) carries the name *Eucalyptus muelleriana* in Howitt's handwriting, and this is now chosen as lectotype; it consists of several small branch-tips of adult leaves and unopened flower-buds, with two detached fruits in an envelope. Apart from occurrences now known at nearby Wilson's Promontory, Nine Mile Creek approaches the most westerly point (Hoddle Creek area) attained by Yellow Stringybark. Records for the Grampians and Mt. Lofty Range are the result of mis-identified *E. baxteri*, and Howitt was apparently unaware in 1891 that the species also extended well into south-eastern New South Wales.

8. ***Eucalyptus regnans*** F. Muell. *Key. Syst. Vict. Plants* 1: 236 (1888).

LECTOTYPE: Dandenong [i.e. Dandenong Ranges], Victoria—"Eucalyptus — of the tall trees measured by Mr. D. Boyle in March 1867" (MEL n. 10168).

Geographical data cited with original description: Nil.

Until making his entry in the *Systematic Census of Australian Plants* 57 (1882), F. Mueller consistently referred this taxon to the name *Eucalyptus amygdalina* Labill. for which he allowed an extremely wide circumscription. The first appearance of the name

E. regnans (but as a *nomen subnudum*) is in *Annu. Rep. Acclim. Soc. Vict.* 7: 48 (1871) where Mueller commented:

“This species or variety, which might be called *Eucalyptus regnans*, represents the loftiest tree in British territory.”

The same statement is repeated word-for-word in Mueller's *Select Plants readily eligible for Industrial Culture or Naturalization in Victoria* 76 (1876), also in Ellwood Cooper's *Forest Culture and Eucalyptus Trees* 31 (1876). The first formal diagnosis of *E. regnans*, thus legitimizing the name, was in *Key to the System of Victorian Plants* 1: 236 (1888); but there is no reference to any locality or collection. Furthermore, Mueller never wrote the epithet “*regnans*” on any label in the Melbourne Herbarium.

For typification of this name, it is necessary to select a specimen from among the large series of collections of ‘White Mountain Ash’ examined by F. Mueller prior to 1888. As lectotype, I have chosen and denominated the example cited above; it is labelled in Mueller's hand, and, in foliar, bud, flower and fruiting characteristics, it most closely approximates to the original description of 1888. The collector's name is not given, but was probably David Boyle of Nunawading.

NEW CULTIVAR IN LEPTOSPERMUM

Leptospermum nitidum ‘Copper Sheen’

The tea-tree, *Leptospermum nitidum* Hook.f., indigenous to the Victorian Grampians also central and western Tasmania, is noteworthy for its large, white, attractive blooms (to 1 inch wide) and lustrous foliage. A form of uncertain origin, and now propagated vegetatively, is becoming popular in Australian gardens. The latter differs from typical *L. nitidum* in the bronzy-purplish colouration of the young flat leaves which are consistently more spreading, in the smaller creamy to even greenish-yellow petals and reddish, much more shortly hairy calyx-lobes.

In E. E. Lord's *Shrubs and Trees for Australian Gardens* p. 214 (Revised edition, 1964), a description of this colourful variant appears under the cultivar name *L. nitidum* ‘Macrocarpum’. The International Code of Nomenclature for Cultivated Plants p. 14 (1961), in Articles 15 & 16, requires that a cultivar name with epithet of Latin form must, if published after 1 January 1959, be accompanied by a description in Latin—precisely as with new botanical taxa—, otherwise it will be illegitimate. One could legitimize ‘Macrocarpum’; but the epithet was most unfortunately chosen, in that fruits of this cultivar are no larger than in typical *L. nitidum*. It seems much better to adopt a purely fanciful name, as proposed above.

Voucher flowering material of *L. nitidum* ‘Copper Sheen’ has been collected at Maranoa Gardens, Balwyn, Vic. (3/5/1966) and lodged for permanent record in the National Herbarium of Victoria, Melbourne.

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